A SINGLE STAGE KINETIC ENERGY WAR-HEAD UTILIZING A BARRIER-BREACHING PROJECTILE FOLLOWED BY A TARGET-DEFEATING EXPLOSIVELY FORMED PRO-JECTILE

Abstract

A single stage kinetic energy warhead using multiple explosively formed projectile (EFP) liners in a stacked configuration is capable of breaching intermediate barriers and defeating a primary target. The main explosive charge is detonated and the subsequent shockwave causes the front liner to be shaped to breach an intermediate barrier. The main liner is formed into a more compact rod–shaped projectile designed to defeat the main target. The weight and volume of the stacked liner configuration of the present system is significantly lower than the weight and volume of current systems. The present system requires a single firing explosive train eliminating developmental cost and complex fusing. The present system utilizes explosive detonation, simplifying the delivery of a projectile and eliminating the need for a missile

delivery system. The size and simplicity of the present system allows for portability and use by an individual.